Installation Guide

FES8912: Fanless Embedded Controller, 2-slot system with Socket P Intel Core 2 Duo Processor

HARDWARE INSTALLATION

The FES8912 are convenient for your various hardware configurations, such as CPU (Central Processing Unit), Memory Module, HDD (Hard Disk Drive) and PCIe card. The chapter 2 will show you how to install the hardware. It includes:

Installing the Processor

The Intel® Pentium® M Processor is available as a boxed processor for laptop computers in the micro-FCPGA form factor. Intel recommends

the processor should be installed by a computer professional since this electronic device may cause serious damage to the installer, system and processor if installed improperly.

Important Notes   Before attempting to install a new processor, carefully review the documentation that came with your system and make sure that you will not be voiding your warranty by opening the computer or replacing your processor.

Instructions:

1.Make sure that your system can accommodate the Intel® Pentium® M Processor that you want to install. Check for motherboard, BIOS, and thermal compatibility by using the manufacturer's documentation for the laptop computer, or by contacting the vendor if necessary. This processor should only be installed in systems supporting the Intel® Pentium® M Processor.

Important Notes   Do not use an Intel® Pentium® M Processor in a desktop system and do not use a desktop processor in an Intel® Pentium® M Processor notebook. Since these processors have different electrical specifications, damage to the processor and system can occur.
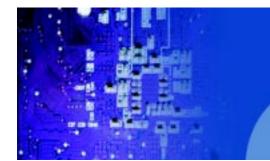
2.Obtain access to your processor socket as described in the documentation for your system.

3.If the cooling solution prevents you from accessing the processor socket, you may need to remove it. Instructions on how to remove your cooling solution should be provided in the documentation that came with the system.

4.To un-install the current processor, use a screwdriver to disengage (open) the socket actuator, as shown in Figure 1 below. (The most commonly used sockets are Molex* or FoxConn* sockets, so they are used in the illustrations below.) The socket actuator should open after only a half turn or so, and you should then be able to remove the processor with your fingers.
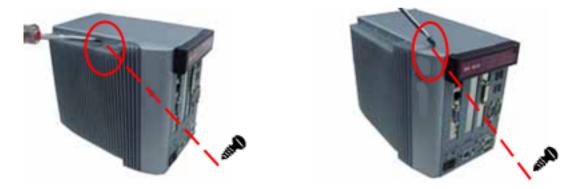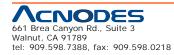
Procedure of Installation:

Step 1   Turn off the system.

Step 2   Disconnect the power connector.

Step 3   Loosen screws to remove the top and side covers from the chassis.

Step 4   After opening the top and side covers, you can locate the CPU socket and heatsink as marked. Align pins of the CPU with pin holes of the socket. Be careful of the CPU's orientation that you need to align the arrow mark on the CPU with the arrow key on the socket. Place the CPU into the socket, and use a screwdriver to lock it onto the socket.
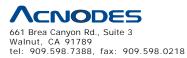
Step 5   Place the CPU Heatsink on the CPU, and lock it by screwdriver.

Step 6   Close the top and side covers back to the chassis, and fasten all screws.
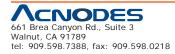
Installing the Memory Module

Step 1   Turn off the system.

Step 2   Disconnect the power connector.

Step 3   Loosen screws to remove the side cover from the chassis.

Step 4   Please follow steps below to install the upper memory module:
1.   Align the memory module with the socket that notches of memory module must match the socket keys for a correct installation.
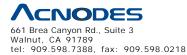
2. Install the memory module into the socket and push it firmly down until it is fully seated. The socket latches are clipped on to the edges of the SO-DIMM.

Step 5   Put back the side cover to the chassis and fasten all screws.
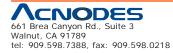
Installing the Hard Disk Drive

The FES8912 offers a convenient drive bay module for users to install HDD. The system offers users one 2.5" Hard Disk Drive for installation. Please follow the steps:

Step 1   Turn off the system.

Step 2   Disconnect the power connector.

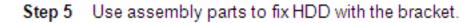**Step 3**   Loosen screws to remove the top & Side cover from the chassis.

Step 4   Open the top cover and locate the two Hard Disk Drives from the side.

Step 5 Use assembly parts to fix HDD with the bracket.

Step 6 Install and fix the HDD through the side, next, plug the power cable in HDD.

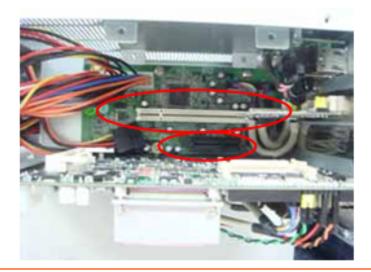**Step 7** Close the top cover back to the chassis and fasten all screws.

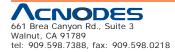## 2.4 Installing the PCI Card (when Backplane HAB104 installed)

Step 1 Turn off the system.

Step 2 Disconnect the power connector.

Step 3 Loosen screws to remove the top cover from the chassis. Removing the PCI or PCIe bracket by releasing the button as marked.

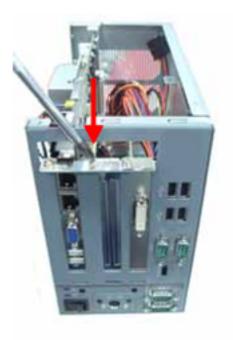**Step 4** Locate the PCI or PCIe slots from the side.

Step 5   Align the PCI or PCIe card with the slot, and press the card into the slot until it is firmly seated.

Step 6   Close the top cover back to the chassis and fasten all screws.